CONSERVATION PRACTICE STANDARD

RIPARIAN HERBACEOUS COVER
(Acre)
CODE 390

DEFINITION

Herbaceous riparian areas are ecosystems that occur along water courses or at the fringe of water bodies. Riparian herbaceous cover consists of grasses, grass-like plants, and forbs.

PURPOSES

Herbaceous riparian areas improve and protect water quality by reducing the amount of sediment and other pollutants, such as pesticides, organic, and nutrients in surface runoff as well as nutrients and chemicals in shallow ground water flow.

Herbaceous riparian areas may provide habitat (food, shelter, and water) for terrestrial and aquatic organisms.

Herbaceous riparian areas help stabilize streambanks.

Herbaceous riparian areas serve as corridors to provide landscape linkages between existing habitats.

CONDITION WHERE PRACTICE APPLIES

Along water courses or on the fringe of water bodies where a herbaceous riparian cover is desired.

CRITERIA

General Criteria Applicable to All Purposes

Select native or other species that are adapted to site conditions and provide diversity and adequate vegetation. Species selected should also provide a deep, binding root mass to strengthen streambanks and improve soil quality.

Riparian widths will vary depending on the requirements of wildlife species and associated environmental concerns; however, the **minimum width will be 30 feet.**

Protect and enhance riparian vegetation and water quality by not using the vegetation for haying and grazing until the desired plant community is well established.

If limited grazing or haying is desired, a plan will be developed to protect and enhance established vegetation, streambank stability and wildlife habitat during critical periods for aquatic and wildlife species.

Management systems applied will be designed to maintain the vigor and reproduction of the desired plant community. Timing of haying or grazing periods will avoid periods when

streambanks are saturated and vulnerable to livestock or mechanical damage.

Harmful pests present on the site will be controlled or eliminated as necessary to achieve and maintain the intended purpose.

Necessary site preparation and planting shall be done at a time and manner to insure survival and growth of selected species. Only viable, high quality, and adapted seed or planting stock will be used. Site preparation shall be sufficient for establishment and growth of selected species and be done in a manner that does not compromise the intended purpose.

Concentrated flow erosion or mass soil movement shall be controlled in the up gradient area prior to establishment of the riparian herbaceous cover.

CONSIDERATIONS

Site hydrology must be considered. Plant species selected must be adapted to the duration of saturation and inundation of the site.

Forested riparian buffers (391) may be used in place of this practice.

Streambank and Shoreline Protection (580) and Stream Channel Stabilization (584) may need to be combined with this practice to address stability issues.

This practice can be combined with filter strips (393) to improve water quality.

Fencing (382) may be needed to protect this practice from livestock or other animals.

Considerations should be given to how this practice will provide riparian habitat and linkage to other habitats.

Establish alternative water sources or controlled access stream crossings to manage livestock access to the stream and riparian area.

Target riparian buffer restoration on a watershed basis to address habitat fragmentation, connectivity, and provide corridors for wildlife by maintaining continuous streamside vegetation.

Establish plant communities and target successional stage based on wildlife needs, existing resources in the watershed, and local management objectives.

Select native or other plant species that have multiple values such as those suited for biomass, nesting, aesthetics, and tolerance to locally used herbicides.

Avoid plant species which may be alternate hosts to undesirable pests. Species diversity should be considered to avoid loss of function due to species-specific pests.

The location, layout and density of the buffer should compliment natural features.

Corridor configuration, species planted, and management should enhance habitats for threatened, endangered, and other species of concern, where applicable.

PLANS AND SPECIFICATIONS

For selection of species to be planted, refer to the Pennsylvania State University current edition of the Agronomy Guide, practice standard code 327 and other appropriate references.

For guidance in the establishment of species use recommendations from references listed in the preceding paragraph.

Specifications for this practice shall be prepared for each site. Specification shall be recorded

using approved specifications sheets, job sheets, narrative statements in the conservation plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

The purpose of operation, maintenance, and management is to insure that the practice functions as intended over time.

The riparian area will be inspected periodically and protected to maintain the intended purpose from adverse impacts such as excessive vehicular and pedestrian traffic, pest infestations, pesticide use on adjacent lands, livestock damage and fire.

As applicable, control of concentrated flow erosion or mass soil movement shall be continued in the up-gradient area to assure proper functioning of the riparian system.

The use of fertilizers, pesticides and other chemicals as part of the management of riparian herbaceous buffer shall not compromise the intended purpose.

REFERENCES

1. The Agronomy Guide (current edition)

   Penn State College of Agricultural Sciences

2. Pa Technical Guide – Section 4 – Practice Standard 327

3. Grass versus Trees: Managing Riparian Areas To Benefit Streams of Central North America.

4. Riparian Buffers for the Connecticut River Valley http://crjc.org/riparianbuffers.htm

5. Riparian Buffer Systems Maryland Cooperative Extension http://www.riparianbuffers.umd.edu/ and http://www.riparianbuffers.umd.edu/refres.html

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.